

ACC NR: AR7000878

SOURCE CODE: UR/0058/66/000/009/E091/E091

AUTHOR: Andronikashvili, E. L. ; Politov, N. G. ; Getiya, M. Sh. ; Galustashvili, M. V.

TITLE: Radiation-induced changes in dislocation density in lithium fluoride crystals irradiated in a reactor at normal and low temperatures

SOURCE: Ref. zh. Fizika, Abs. 9E731

REF SOURCE: Sb. Elektron. i ion. protsessy v tverd. telakh. No. 2, Tbilisi, Mitsniyereba, 1965, 3-13

TOPIC TAGS: crystal dislocation, lithium fluoride, dislocation density, lithium fluoride crystal

ABSTRACT: Changes in dislocation density (DD) was observed in LiF crystals irradiated at 155 and 110K in the reactor of IRT IF AN GSSR. Irradiation at lower temperatures resulted in a lesser relative change in DD. High-temperature annealing of LiF crystals was also studied. During annealing at sufficiently high-temperatures, DD is found to drop to lower than initial values. The supposition expressed by the authors previously on the "condensing" mechanism of the radiative

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ACC NR: AR7000878

generation of dislocations is repeated. Accumulations of various kinds of point defects were studied by the method of selective etching and photomicrography. The mechanical properties of LiF crystals were investigated at the same time. It was found that radiation strengthening is accompanied by the occurrence of a large number of coagulated defect accumulations which produce high dynamic resistance to the movement of dislocations, while softening is accompanied by the disappearance of these flaws. A. Kiv. [Translation of abstract] [DW]

SUB CODE: 20/

Card 2/2

ACC NR: AR7000877

SOURCE CODE: UR/0058/66/000/009/E090/E090

AUTHOR: Andronikashvili, E. L.; Politov, N. G.; Abramishvili, M. G.

TITLE: Formation of coloration centers in alkaline halide crystals exposed to irradiation in a reactor at room and low temperatures

SOURCE: Ref. zh. Fizika, Abs. 9E721

REF SOURCE: Sb. Elektron. i ion. protsessy v tverd. telakh, No. 2, Tbilisi, Metsniyereba, 1965, 14-18

TOPIC TAGS: color center, crystal dislocation, alkali halide, crystal absorption, crystal coloration, irradiation coloration

ABSTRACT: Kinetics of the coloration of LiF and KCl crystals was investigated following irradiation in an IRT IF ANGSSR reactor at 300, 155, and 110K. The coloration intensity was determined by the absorption coefficient for $\gamma=300 \text{ m}\mu$. The dose-related coloration intensity proved to be nonmonotonic. During irradiation with neutron flux of lesser intensity and using a γ -screen, the coloration of crystals was found to be weaker, although the qualitative shape of the dose curve remained unchanged. Concomitantly a more intensive generation of dislocations

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ACC NR: AR7000877

took place. It was established that the coloration intensity of KCl crystals was stronger when crystals were exposed for shorter irradiation periods in the reactor and that the coloration was weaker than that of LiF crystals during longer exposure to irradiation. This seems to be in contradiction with data already published concerning a higher accumulation rate of coloration centers during γ -irradiation of crystals with a lower lattice energy. This discrepancy is reconciled on the basis of the lithium nuclear reaction occurring in $\text{Li}^6 (n, \alpha) \text{H}^3$. The agreement of the maximum dislocation density with the minimum of F-centers concentration is explained as due to the irradiation dose which determines two competitive processes: vacancies condensation and electron capture by the vacancies. A. Kiv.
[Translation of abstract] [AM]

SUB CODE: 20/

Card 2/2

ACC NR: AR7000864

SOURCE CODE: UR/0058/66/000/009/E039/E039

AUTHOR: Politov, N. G.; Driyayev, D. G.

TITLE: L-f internal friction in lithium fluoride crystals

SOURCE: Ref. zh. Fizika, Abs. 9E311

REF SOURCE: Sb. Elektron. i ion. protsessy v tverd. telakh. No. 2. Tbilisi, Mesniyereba, 1966, 35-39

TOPIC TAGS: lithium fluoride, internal friction, lithium fluoride single crystal, lf internal friction

ABSTRACT: The temperature dependence of the internal friction (IF) of LiF single crystals was measured at a frequency of one cps. Before measurement, the specimens were annealed for five hr at 700C. They were then cooled to the temperature of liquid nitrogen and the IF was measured at a heating rate of 0.5C/min. The spectrum of IF peaks was observed on all specimens. Two of these peaks, at 160K (I) and at 210K (II), were well reproduced. With x-ray irradiation for one hr, peak I disappears and peak II increases. Deformation causes the opposite effect. Exposure at room temperature results in the recurrence of the

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ACC NR: AR7000864

peaks. Repeated treatments of specimen cause similar changes, but of much lesser magnitude. It appears that peak II is linked to vacancies, while peak I is linked to dislocations. However, as yet there is no clear understanding of the nature of these peaks. V. Vernier. [Translation of abstract] [DW]

SUB CODE: 20/

Card 2/2

ACC NR: AT7000178

SOURCE CODE: UR/3182/65/002/000/0014/0018

AUTHOR: Andronikashvili, E. L.; Politov, N. G.; Abramishvili, M. G.

ORG: none

TITLE: The formation of color centers in alkali halide crystals irradiated in a reactor at usual and low temperatures

SOURCE: AN GruzSSR. Institut fiziki. Elektronnyye i ionnyye protsessy v tverdykh telakh, v. 2, 1965, 14-18

TOPIC TAGS: color center, neutron irradiation, irradiation effect, crystal absorption, crystal lattice dislocation, gamma irradiation, *alkali halide*

ABSTRACT: An investigation was made of the coloring of lithium fluoride and potassium chloride crystals irradiated in the vertical experimental channel of a reactor at room temperature (300K) and in low-temperature loops at 300K, 155K, and 110K. The IRT reactor at the Physics Institute of the Academy of Sciences of the Georgian SSR was used for the low-temperature measurements. The measurements of optical absorption by LiF crystals irradiated in a reactor channel with $\Phi = 3.2 \times 10^{12}$ neutron/cm²sec showed that with an increase in irradiation time the coloring increased nonmonotonically: the maxima were replaced by minima. Apparently, both neutrons and gamma-quanta contribute to the coloring. The comparison of results showed that in a channel with a weaker intensity of neutron flux and with a gamma-screen the specimens were

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ACC NR: AT7000178

colored more weakly. Irradiation in a channel with a gamma-screen caused a more intensive generation of dislocations. The attenuation of the gamma-radiation also caused a decrease in the coloring of KCl crystals. A decrease in the irradiation temperature resulted in considerably weaker coloring of the LiF crystals. For KCl crystals, the coloring was stronger when the irradiation temperature was lowered. [AB]
Orig. art. has: 5 figures.

SUB CODE: 20/¹⁸ SUBM DATE: none/ ORIG REF: 002/ OTH REF: 003/ ATD PRESS: 5109

Card 2/2

ACC NR: AT7000180

SOURCE CODE: UR/3182/65/002/000/0027/0034

AUTHOR: Andronikashvili, E. L.; Vorozheykina, L. F.; Igitkhanishvili, D. D.;
Politov, N. G.

ORG: none

TITLE: Radiative changes in the conductivity of KCl and LiF crystals

SOURCE: AN GruzSSR. Institut fiziki. Elektronnyye i ionnyye protsessy v
tverdykh telakh, v. 2, 1965, 27-34

TOPIC TAGS: neutron irradiation, gamma irradiation, crystal dislocation, crystal
defect

ABSTRACT: An investigation was made of the relationship between the ionic conductivity and the activation energy of carriers in KCl and LiF crystals caused by reactor irradiation. The temperature dependence of ionic conductivity was investigated in the range from 50 to 400C. The heating of the specimens was carried out at a constant rate of 1 °C/min. The measurements were made in a vacuum of 10^{-4} mm Hg. The specimens were irradiated in the IRT reactor of the Physics Institute of the Academy of Sciences, Georgian SSR at a point where the thermal neutron flux was 2.07×10^{12} neutrons/cm²·sec. The conductivity was measured before and after irradiation with specimens produced from a single ingot. Radiative changes in conductivity accompanied sharp changes in the crystal microstructure following

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ACC NR: AT7000180

irradiation with "critical" doses. For example, KCl crystals irradiated with a dose of 1.2×10^{16} n/cm² displayed a minimum of dislocations when the activation energy was at a minimum and the conductivity was at a maximum. KCl specimens irradiated with doses of 5.8×10^{16} n/cm² and 1.1×10^{17} n/cm² had activation energies of the current carriers of 0.96 ev and 0.84 ev, respectively. Prior to irradiation, the activation energies were 0.84 ev and 1.0 ev, respectively. The thermal treatment taking place during the measurement of conductivity in KCl specimens irradiated at 7.6×10^{15} n/cm² in the temperature range from 75 to 300C did not produce any changes in the conductivity or the activation energy of the current carriers. In LiF crystals, each thermal treatment increased the conductivity of the specimen and decreased its activation energy. The authors thank G. N. Garsevanishvili for irradiating the specimens and V. G. Kvachadze for his participation and discussion of the results. Orig. art. has: 10 figures and 1 table.

[JA]

SUB CODE: 20/ SUBM DATE: none/ ORIG: REF: 002/ OTH REF: 004/ ATD PRESS: 5109

Car 2/2

L 33173-66 EWT(1)/T IJP(c) GG

ACC NR: AR6016236

SOURCE CODE: UR/0058/65/000/011/EO90/EO90

AUTHOR: Andronikashvili, E. L.; Politov, N. G.; Vorzheykina, L. Ya.; Abramishvili, M. G.

TITLE: Influence of structure defects on the mechanical properties of crystals

35
B

SOURCE: Ref. zh. Fizika, Abs. 11E695

REF SOURCE: Sb. Elektron. i ionnyye protsessy v tverd. telakh. No. 1, Tbilisi, Metsniyereba, 1964, 13-30

TOPIC TAGS: crystal defect, irradiation effect, potassium compound, hardness, color center, Gamma irradiation, x ray irradiation, neutron irradiation

ABSTRACT: An investigation was made of the influence of irradiation by x rays, γ rays, and neutrons at ordinary temperatures and at liquid-nitrogen temperature on the hardness of KCl and LiF crystals. Three types of hardness were measured: the microhardness H_m , the scratch hardness H_s , and hardness based on the damping of pendulum oscillations H_p . It is shown that as a result of the F-center formation under irradiation with x rays the KCl crystal becomes softer. The discoloring leads to restoration of the H_p hardness. LiF crystals harden when irradiated with x and γ rays independently of F-center formation. Irradiation of KCl crystals influences differently different types of hardness. It is shown that H_s , which decreases upon irradiation at ordinary temperatures, increases after irradiation at low temperatures. When crystals are neutron-irradiated, all three types of hardness increase even

Cord 1/2

L 33173-66

ACC NR: AR6016236

during the first stage of irradiation. Low-temperature irradiation of LiF crystals leads to a smaller radiation hardening than irradiation at ordinary temperatures. The process of radiation hardening is completely reversible: annealing of crystals at 600C for 3 hours completely eliminates the hardening. The influence of iso-thermal annealing at 300 and 700C is demonstrated. B. Prusakov. [Translation of abstract]

SUB CODE: 20

Card 2/2 mc

L 29925-66 EWI(m)/I/EWP(t)/ETI IJP(c) JD/JG

ACC NR: AR6010584

SOURCE CODE: UR/0081/65/000/018/L032/L033

AUTHOR: Kvavadze, K. A.; Politov, N. G.

50
B

TITLE: Ionic etching of sodium chloride crystal

SOURCE: Ref. zh. Khimiya, Abs. 18L218

REF SOURCE: Sb. Elektron. i ionnyye protsessy v tverd. telakh. No. 1, Tbilisi, Metsniyereba, 1964, 94-97

TOPIC TAGS: ion bombardment, etched crystal, crystal dislocation, sodium chloride

ABSTRACT: The possibility of dislocations appearing on the plane (100) of NaCl crystals as a result of ionic bombardment is shown. This etching method is proposed for fixing crystal structure dislocations during the process of irradiation inside a reactor.

A. Urusovskaya

SUB CODE: 20/ SUBM DATE: none

Card 1/1 CC

L 2438-66 EWT(1)/EWT(m)/EPF(c)/EPF(n)-2/T/EWP(t)/EWP(b)/EWA(c) IJP(c)
JD/JG/GG/GS

ACCESSION NR: AT5023808

UR/0000/62/000/000/0277/0287

51

AUTHOR: Andronikashvili, E. L.; Politov, N. G.; Getiya, M. Sh.

50

B+1

TITLE: Effect of reactor irradiation on the structure and hardness of alkali halide crystals

27

SOURCE: Soveshchaniye po probleme Deystviye yadernykh izlucheniy na materialy. Moscow, 1960. Deystviye yadernykh izlucheniy na materialy (The effect of nuclear radiation on materials); doklady soveshchaniya. Moscow, Izd-vo AN SSSR, 1962, 277-287

TOPIC TAGS: potassium chloride, lithium fluoride, crystal dislocation, hardness, irradiation effect, x ray irradiation, neutron irradiation, gamma irradiation

ABSTRACT: Potassium chloride and lithium fluoride single crystals were irradiated in the IRT-2000 reactor of the Institut fiziki AN Gruz. SSR (Institute of Physics, AN Gruz. SSR) in vertical experimental channel No. 5. The thermal neutron flux was $n \approx 1.03 \times 10^{12} \text{ n/cm}^2 \text{ sec}$. The dislocations were studied by etching. The dislocation density in KCl crystals is unaffected by the x-rays in the dose interval employed. Beginning at an integral dose of $\sim 10^{16} \text{ n/cm}^2$, the reactor irradiation causes the dislocation density to rise sharply. Long before the appearance of the first dislocations induced by the irradiation, the micro-

Card 1/2

1. 2438-66

ACCESSION NR: AT5023808

hardness of KCl and LiF crystals begins to increase with the irradiation time. Thermal treatment of irradiated LiF crystals at 250C restores the initial micro-hardness only partially, whereas thermal treatment at 500C reestablishes the original mechanical properties of the crystals completely. The dislocation density in irradiated samples remains unchanged as a result of annealing at 250C as compared to nonannealed samples. Consequently, dislocations which formed during irradiation may under certain conditions have no effect on the microhardness of the irradiated samples. Thermal treatment causes a decrease of dislocation density beginning at 350C. In LiF crystals annealed at 700C, no dislocations are observed with the aid of the technique employed, perhaps because they are completely masked by square pores. Orig. art. has: 9 figures.

ASSOCIATION: none

SUBMITTED: 18Aug62

ENCL: 00

SUB CODE: NP, SS

NO REF SOV: 000

OTHER: 003

Card

2/2 *md*

L 2437-66 EWT(1)/EWT(m)/T/EWP(t)/EWP(b)/EWA(c) IJP(c) JD/JG/GG/GS

ACCESSION NR: AT5023807

UR/0000/62/000/000/0268/0276

AUTHOR: Andronikashvili, E. L.; Politov, N. G.; Vorozheykina, L. F. 44.65 62 B+1

TITLE: Effect of lattice disturbances on the mechanical and optical properties of potassium chloride crystals 44.65

SOURCE: Soveshchaniye po probleme Deystviye yadernykh izlucheniya na materialy. Moscow, 1960. Deystviye yadernykh izlucheniya na materialy (The effect of nuclear radiation on materials); doklady soveshchaniya. Moscow, Izd-vo AN SSSR, 1962, 268-276 21.44.65

TOPIC TAGS: potassium chloride, crystal lattice defect, F band, color center, irradiation effect, hardness, x ray irradiation, neutron irradiation, gamma irradiation

ABSTRACT: The paper presents initial results of studies undertaken at the Institut fiziki AN Gruz. SSR (Institute of Physics AN Gruz SSR) for the purpose of determining the relationship between various types of lattice disturbances and the hardness of alkali halide crystals. Various methods of inducing the disturbances were employed (additive coloring, x-irradiation, and irradiation with mixed neutron and gamma radiation in the IRT-2000 reactor). Additive and subtractive coloring of KCl single crystals caused a decrease in microhardness and Card 1/2

L 2437-66

ACCESSION NR: AT5023807

scratch hardness; the latter was more sensitive to change in the number of F-centers than the former. Upon exposure to n, γ -radiation, the microhardness and scratch hardness behave differently as the dose increases. It is suggested that this irradiation causes, in addition to the formation of F-centers, new kinds of lattice disturbances which even at low concentrations mask the influence of F-centers on the microhardness effect. The hypothesis that the same defects may affect different types of hardness to different degrees is confirmed. Furthermore, situations arise where different types of hardness change in different directions under the same conditions. This indicates that each type of hardness has a predominant relationship with certain definite types of lattice disturbances. Studies of the influence of x-rays on the F-band intensity show that the number of F-centers changes in a complex manner with increasing irradiation time. Orig. art. has: 10 figures.

ASSOCIATION: none

SUBMITTED: 18Aug62

ENCL: 00

SUB CODE: SS, OP

NO REF SOV: 003

OTHER: 015

Card 2/2 *md*

L 11099-66 EWT(m)/EPF(n)-2/T/EWP(t)/EWP(b) DIAAP/IJP(c) JD/JG
 ACC NR: AR5019466 SOURCE CODE: UR/0058/65/000/007/E041/E041
 AUTHOR: Kvavadze, K.A.; Politov, N.G.
 ORG: none
 TITLE: Ionic attack on sodium chloride crystals
 SOURCE: Ref. zh. Fizika, 7E337
 REF SOURCE: Sb. Elektron. i ionnyye protsessy v tverd. telakh. No. 1, Tbilisi, Metsndiyereba, 1964, 94-97
 TOPIC TAGS: reactor, radiation instrument, crystal structure, crystal dislocation
 TRANSLATION: The possibility is shown for exposing the dislocation yield on faces (100) of NaCl crystals as a result of ionic attacks. It is proposed to use this method of attack for recording the dislocation structure of crystals during the radiation process inside a reactor. A. Urosovskaya
 SUB CODE: 18,20

37
R

Card 1/1 FW

BAKHTOV, S.G., dotsent; POLITOV, S.N.

Method for determining the alkalinity of milk with bromothymol
blue. Veterinariia 42 no.7:79 J1 '65. (MIRA 18:9)

1. Moskovskaya veterinarnaya akademiya (for Bakhtov). 2. Glavnyy
veterinarnyy vrach sovkhoza "Voskresenskoye", Moskovskoy oblasti
(for Politov).

L 6370-66

ACC NR: AP5026751

SOURCE CODE: UR/0286/65/000/017/0025/0026

INVENTOR: Artemenko, Ye. P.; Politova, A. Ye.; Polchaninov, V. A.; Nekroyenko, N. V.; Zemskov, B. A.

TITLE: A multisectional collapsible girder post. Class 21, No. 174226 [announced by Organization of the Ministry of Defense SSSR (Organizatsiya Ministerstva oborony SSSR)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 17, 1965, 25-26

TOPIC TAGS: hoisting equipment, construction machinery

ABSTRACT: This Author's Certificate introduces a multisectional collapsible girder post of improved operational reliability based on Author's Certificate No. 158606. A hoisting carriage is fastened in a gap in the load chain by means of a hinged link which is connected with a pivoted block used for forced collapse of the post sections. This carriage contains a spring-return catch made in the form of a hinged lever with a triangular groove and trihedral teeth in the free end.

UDC: 621.396.676

Card 1/2

DW
Card 2/2

0902 0152

L 59206-65 EWT(m)/T/EWP(b)/EWA(d)/EWP(w)/EWP(t) IJP(c) JD

ACCESSION NR: AR5017546

UR/0058/65/000/006/EO66/EO66

SOURCE: Ref. zh. Fizika, Abs. 6E519

20

AUTHORS: Lozovskiy, V. N.; Politova, N. F.; Gershakov, V. Yu.

B

TITLE: Effect of the work function of the metal on the rectifying properties of a metal-silicon contact

CITED SOURCE: ²¹Uch. zap Kabardino-Balkarsk. un-t. Ser. fiz.-matem. n., vyp. 19, 1963, 329-334

TOPIC TAGS: work function, rectifier action, contact potential difference, barrier rectification, leakage current

TRANSLATION: An investigation was made of the dependence of the height of the barrier on the contact potential difference under conditions which exclude the influence of the surface leakage current. An investigation of the inverse branch of the voltage-current characteristic of Ca, Mg, Cr, Cu, and Pt contacts sputtered on Si (resistivity 10--12 ohm-cm) has shown that there is a clear-cut correlation between the work function of the metal and the usual (volume) component of the barrier current, i.e., the height of the barrier. The type of surface finish of the silicon greatly influences the magnitude of the ordinary barrier current, but

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ACCESSION NR: AR5017546

under the experimental conditions the surface levels do not screen completely the effect of the contact potential difference, and its role is clearly manifest.

SUB CODE: SS

ENCL: 00

7MB
Card 2/2

L 01129-66 EWT(m)/EWP(t)/EWP(b) IJP(c) JD

ACCESSION NR: AR5013778

UR/0275/65/000/004/B020/B020
621.382.13:546.28

SOURCE: Ref. zh. Elektronika i yeye primeneniye. Sv. t., Abs. 4B146

AUTHOR: Lozovskiy, V. N.; Politova, N. F.; Gershonov, V. Yu.

TITLE: Effect of the metal work function on the rectifying characteristics of a metal-silicon contact

CITED SOURCE: Uch. zap. Kabardino-Balkarsk. un-t. Ser. fiz.matem. n., vyp. 19, 1963, 329-334

TOPIC TAGS: semiconductor diode, silicon diode, work function

TRANSLATION: The effect of contact potential difference on barrier height, with no interference from the surface leakage current, has been investigated. Studies of the reverse branch of the current-voltage characteristic of Ca, Mg, Cr, Cu, and Pt contacts sprayed upon a 10--12-ohm-cm silicon have shown that a fairly definite correlation exists between the metal work function, the ordinary component of the inverse current, and the barrier height. This correlation does not extend to the total leakage current. The surface processing has also an essential influence on the ordinary reverse current; however, under experimental

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L 01129-66

ACCESSION NR: AR5013778

conditions, the surface levels only partially mask the action of the contact potential difference, and its role can be clearly seen. Bibl. 8. 0

SUB CODE: EC

ENCL: 00

Card 2/2 DP

DAVITASHVILI, T.Sh.; POLITOV, N.G.

F-centers in potassium chloride crystals irradiated in a reactor.
Opt. 1 spektr. 17 no.6:871-879 D '64. (MIRA 18:3)

ANDRONIKASHVILI, E.L.; POLITOV, N.G.; GETIYA, M.Sh.; VOROZHEYKINA, L.F.

Radiation damages in ionic crystals. izv. AN SSSR. Ser.fiz. 29
no.3:366-370 Mr '65. (MIRA 18:4)

VOROZHEYKINA, L.F.; IGITKHANISHVILI, D.D.; POLITOV, N.G.; KVACHADZE, V.G.

Electric and thermal conductivities and optical absorption in
irradiated alkali metal halide crystals. Izv. AN SSSR Ser. fiz.
29 no.1:75-77 Ja '65. (MIRA 18:2)

1. Institut fiziki AN GruzSSR.

L 16286-65 EPA(s)-2/EWT(m)/EPF(c)/EPF(n)-2/EWP(t)/EWP(b) Pr-4/Pt-10/
Pu-4 IJP(c)/ESD(gs)/ESD(t)/BSD/AFWL/ASD(a)-5/AS(mp)-2/APGC(b) JD/JG/GG

ACCESSION NR: AP5000546

S/0051/64/017/006/0871/0879

AUTHORS: Davitashvili, T. Sh.; Politov, N. G.

TITLE: F centers in potassium chloride crystals irradiated in a
reactor 27 19 B

SOURCE: Optika i spektroskopiya, v. 17, no. 6, 1964, 871-879

TOPIC TAGS: F center, potassium compound, neutron irradiation,
x ray irradiation, optical absorption, absorption spectrum, crystal
lattice distortion

ABSTRACT: To check on the possible changes in the parameters of
the F band as a result of irradiation of crystals in the active
zone of an atomic reactor, the authors studied the F-band in the
spectra of additional optical absorption of potassium chlorite
crystals irradiated with neutrons in a reactor (10^{12} neut/cm² sec)
and by a ZBP(D)-200 x-ray tube (65 kV, 10 mA). Some 10--15

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L 16286-65

ACCESSION NR: AP5000546

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samples measuring 16 x 8 x (2--0.5) mm were cut from a single crystal ingot grown by the Kiropoulos method from "specially pure" material. The samples were simultaneously irradiated at fixed points of the active zone of the atomic reactor, in integral neutron fluxes 2.16×10^{16} -- 3.6×10^{17} neut/cm². The irradiated samples were stored for some time (up to a month) to allow the induced radioactivity to drop to a permissible level. "Self-colored" and x-ray irradiated samples were investigated in parallel. The self-coloring was produced by the residual radioactivity of a crystal exposed to a neutron flux 3.6×10^{17} neut/cm² and stored for 21 months in darkness at room temperature. The optical absorption spectra were measured with SF-4 spectrophotometer with a cryostatic attachment that made measurements possible in the range 85--300K. The results show that the half-width of the F-band increases with increasing integral neutron flux. An investigation of the form and temperature dependences of the parameters of the separated F-band has shown that the observed broadening is not the result of over-

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L 16286-65

ACCESSION NR: AP5000546

lapping different bands, but is due to the interaction of the F-center with the distorted crystal lattice. The conclusions are corroborated by a comparison of the theoretical parameters for F-centers with ideal and distorted crystal environments. Orig. art. has: 7 figures, 4 formulas, and 1 table.

ASSOCIATION: None

SUBMITTED: 20Nov63

ENCL: 00

SUB CODE: SS, OP

NR REF SOV: 003

OTHER: 007

Care

3/3

POLITOV, Oleg Aleksandrovich; BOGORAD, Yu.D., nauchn. red.,;
NANKIN, M.B., red.

[Drilling tool for drilling deep oil and gas wells; digest
of foreign patents] Burovoi instrument dlia bureniia glubokikh
neftianyykh i gazovykh skvazhin; obzor inostrannykh
patentov. Moskva, TsNIPI, 1964. 24 p. (MIRA 18:3)

POLITOV, S.N., veterinarnyy vrach

Look for a vaginal speculum. Zhivotnovodstvo 23 no.8:81-82
Ag '61. (MIRA 16:2)

1. Sovkhoz "Voskresenskoye" Moskovskoy oblasti.
(Speculum (Medicine))
(Artificial insemination--Equipment and supplies)

POLITOV, S. N.

USSR/Farm Animals. Cattle.

Q

Abs Jour: Ref Zhur-Biol., No 17, 1958, 78729

Author : Politov, S. N.

Inst : ~~USSR Academy of Sciences~~

Title : On Optimal Periods of Mating of Cows After Calving.

Orig Pub: Zhivotnovodstvo, 1957, No 8, 52-60.

Abstract: No abstract.

Card : 1/1

POLITOV, S. N., CHERNAVEKIY, V. V., TIRKONEN, I. Ya., SEL'CHENKO, V. A., and
MAST'YANOV, S. N.

"Means for dehorning calves and cattle."

Veterinariya, Vol. 38 No. 5, 1961

Politov, S. N. -Veterinary Surgeon- Moscow Technological Institute of Meat and
Milk Industry

UVACHAN, Vasilii Nikolayevich; SERGEYEV, M.A., red.; POLITOV, Z., red.;
MUKHIN, Yu., tekhn.red.

[Transition to socialism of small national groups in the North;
based on data for the Evenki and Taimyr national areas] Perekhod
k sotsializmu malykh narodov Severa; po materialam Evenkiiskogo
i Taimyrskogo natsional'nykh okrugov. Pod red. M.A. Sergeeva.
Moskva, Gos.izd-vo polit.lit-ry, 1958. 182 p. (MIRA 12:2)
(Evenki National Area--Economic conditions)
(Taimyr National Area--Economic conditions)

BORISOV, Yuriy Stepanovich; POLITOV, Z., red.; TROYANOVSKAYA, N.,
tekhn.red.

[Twenty-five thousand envoys to collective farms] 25-tysiachniki.
Moskva, Gos.izd-vo polit.lit-ry, 1959. 93 p. (MIRA 13:4)
(Collective farms)

ZVEZDIN, Z.K., nauchnyy sotrudnik; ROGACHEVSKAYA, L.S., nauchnyy sotrudnik;
VOLKOVA, N.F., mladshiy nauchnyy sotrudnik; KIM, M.P., doktor
istoricheskikh nauk, red.; POLITOV, Z., red.; TYUNYEVA, A.,
tekh.n.red.

[First steps in the industrialization of the U.S.S.R., 1926-1927]
Pervye shagi industrializatsii SSSR, 1926-1927 gg. Moskva, Gos.
isd-vo polit.lit-ry, 1959. 532 p. (MIRA 12:5)

1. Akademiya nauk SSSR. Institut istorii. 2. Tsentral'nyy gosudarstvennyy arkhiv Oktyabr'skoy revolyutsii i sotsialisticheskogo stroitel'stva SSSR (for Zvezdin). 3. Institut istorii AN SSSR (for Rogachevskaya, Volkova).

(Russia--Industries)

KHAVIN, Abram Fischelevich, zhurnalis; POLITOV, Z., red.; DANILINA, A.,
tekhn. red.

[Concise study of industrialization in the U.S.S.R.] Kratkii
oчерk istorii industrializatsii SSSR. Moskva, Gos. izd-vo
polit. lit-ry, 1962. 436 p. (MIRA 15:4)
(Russia--Industries)

POLITOVA, A.G.

6724. Influence of iodine-bromine water on gastric secretion in dogs. A. G. Politova. *Sborn. nauch. Rabot. Medits. mss. Inst.*, 1955, 174-177. *Russiat. Zh. Biol.*, 1958, Abstr. No. 92098. The highest concn. of iodine-bromine water [I] that could be tolerated was found to be 10%. Greater concn. cause dribbling of spittle, vomiting, and liquid stools. By prolonged use of tolerated concn. a beneficial effect was produced. Wt., growth, Hb. and no. of r.b.c., increased, as did the amount of protein in the blood serum, and the periodic activity of the stomach. A single dose brought about a phase of inhibition and a phase of stimulation of this activity. The study of the influence of I on gastric secretion was made on 3 dogs with a Pavlov pouch and fistula of the main stomach. Its introduction into the stomach increased both the amount and the acidity of the gastric juice. Two phases of the action of a single dose on gastric secretion were noted, a phase of depressed, and a phase of enhanced, activity. (Russian)

H. ASNER

AUTHOR: EL'YASHEVA, M.A., POLITOVA, A.I. 32-6-32/54
TITLE: The Automatic Arrangement of a Hydraulic Machine for Investigations with Repeated Static Stresses. (Avtomaticheskoye ustroystvo k gidravlicheskoy mashine dlya ispytaniya povtorno-staticneskimi nagruzkami, Russian)
PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol 23, Nr 6, pp 741-742 (U.S.S.R.)
ABSTRACT: For the purpose of investigating the static resistibility of materials hydraulic tensile testing machines (produced by the firm of Losenhausen as well as of the Russian type MUG) of 15 t each were used. They consist of a distributor box with 2 manometers (with adjustable contacts), a directioning device, a solenoid with lever transmission leading to the exhaust valve and a panel with the electric equipment. The box serves for the distribution of oil either to the manometer (in the case of investigations with repeated static stresses) or to the pendulum dynamometer (for static investigations). The distributor box together with the pendulum dynamometer is connected with the tube system leading to the cylinder. This system is used for measuring force. Stresses and loads are controlled by means of one of the two manometers, which are brought about automatically by means of two contacts

Card 1/2

GORIN, A.P., prof.; DUNIN, M.S.; KONOVALOV, Yu.B.; MITROFANOVA,
K.S.; POLITOVA, I.D.; SAMSONOV, M.P.; SELAVRI, M.K.;
UKOLOV, A.A.; YURTSEV, V.N.; GRACHEVA, V.S., red.;
~~BOKOLOVA, K.M.; Tokina, Fed.~~

[Manual on field work in the breeding and seed production
of field crops] Rukovodstvo k prakticheskim zaniatiyam po
~~selektsii~~ i semenovodstvu polevykh kul'tur. [By] A.P.Gorin
i dr. Moskva, Sel'khozizdat, 1963. 574 p.

(MIRA 16:12)

1. Kollektiv prepodavateley kafedry genetiki, selektsii i
semenovodstva polevykh kul'tur Moskovskoy sel'skokhozyay-
stvennoy akademii im. K.A.Timiryazeva (for Gorin, Konovalov,
Mitrofanova, Samsonov, Selavri, Ukolov, Yurtsev). 2. Kafedra
Fitopatologii Moskovskoy sel'skokhozyaystvennoy akademii im.
K.A.Timiryazeva (for Dunin). 3. Kafedra statistiki Moskovskoy
sel'skokhozyaystvennoy akademii im. K.A.Timiryazeva (for
Politova).

(Field crops) (Seed production)

POLITOVA, I.D., aspirant.

Production cost of grain and wool on collective farms of Petrovskoye
District in Stavropol Territory. Dokl. TSKhA no.27:23-30 '57.
(Grain) (Sheep) (MIRA 11:4)

KOKIN, A.Ya.; POLITOVA, I.M.

Study of the biology and physiology of branched wheat. Trudy Kar.-
fin.gos.un. 6 no.3:3-22 '54.
(MLRA 10:2)

1. Kafedra fiziologii rasteniy.
(Wheat)

POLITOVA, K.S.

Effect of manual training in the boarding school on the higher nervous
activity of the students. Trudy Inst. vys. nerv. deiat, Ser. patofiziol.
8:50-57 '61, (MIRA 15:2)
(NERVOUS SYSTEM) (MANUAL TRAINING...PHYSIOLOGICAL EFFECT)

SHUMILOV, V. (pos.Svecha, Kirovskaya obl.); BURAVLEV, V.; FOMIN, A., mekhanik;
NIKONCHIK, V.; POLITOVA, L.

From our mail. Mest.prom.i khud.promys. 3 no.5:35 My '62.
(MIRA 15:6) .

1. Nachal'nik mebel'nogo tsekha Pestovskogo rayonnogo
promyshlennogo kombinata Novgorodskogo oblimestprama (for
Buravlev). 2. Gorodishchenskiy rayonnyy promyshlennyy kombinat,
Volgogradskaya oblast' (for Fomin).
(Industry)

41026

S/058/62/000/009/066/069
A057/A101

497700

AUTHORS: Gontar', P. I., Politova, N. F.

TITLE: Experimental investigation of the transition resistance of the contact of a metal with a semiconductor.

PERIODICAL: Referativnyy zhurnal, Fizika, no. 9, 1962, 9, abstract 9-4-17u ("Tr. Novocherk. politekhn. in-ta", 1961, 118, 63 - 64)

TEXT: The quality of measuring contacts (C), applied by the electrolytic method on samples of monocrystalline Si, was investigated. The quality of the C was characterized by the value of the transition resistance $\Delta R = (R - R_0)/2S$, where R and R_0 stand for the resistance of the sample with the applied C and without C respectively; S = surface of the applied C. R was measured by the voltmeter-ammeter method, R_0 was determined by the geometric dimensions of the sample and its specific resistance, measured by the probe method with a compensation circuit. The adopted determination of ΔR yields the mean value of the transition resistance of two C of one material applied by the same method. The scatter of ΔR values at different measurements did not exceed 30%. It was

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Experimental investigation of the...

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A057/A101

observed that iron and copper C oxidize relatively quickly in air; as a result their ΔR changes with time. Nickel and cobalt C have considerable ΔR . Most suitable contacts for S1 are those of palladium. There are 8 references.

E. P.

[Abstracter's note: Complete translation]

Card 2/2

POLITOVA, N. M.

USSR .

Physical properties of the antimony-cesium cathode. N. M. Politova (Moscow State Univ.). *Zhur. Eksp. i Teor. Fiz.* 25, 463-70(1953). The distribution of the energy of photoelectrons is a function of the thickness of the Sb-Cs layer as well as of the material of the subsurface material (Ni or glass). The principal factor is the loss of energy of the departing electrons as the result of the interaction with the cryst. lattice and with the conducting electrons of the cathode. Photoemission proceeds directly from depths down to 10^{-4} - 10^{-5} cm. For layers of 10^{-4} cm. thickness, photoemission takes place from the metallic subsurface carrier. The thermoelectric work of removal is not equal to the photoelectric, and depends, unlike the latter, on the layer thickness and on the material of the carrier-base. The curves for the energy distribution of the secondary electrons show that for the Sb-Cs cathode there is a large group of electrons for which an accelerating field many times the contact difference of potential between anode and cathode is required. F. H. Rathmann

62

POLITOVA, N. M.

"Investigation of the Emission Properties of Cesium-Antimony Cathodes."
Cand Phys-Math Sci, Moscow State U, Moscow, 1954. (KL, No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher
Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

Pol, Tova, N. M.

Distr: 4E4j

The energy distribution of photoelectrons from an antimony-cesium cathode. N. M. Peltova. *Radiotekh. i Elektron.* 1, 1325-33 (1958). Investigations were made on the energy-distribution curves of photoelectrons as a function of the incident radiation for the Sb-Cs cathode. The presence of electrons of "excess velocity" was detected in the emission from the cathode. The value of the excess velocity decreases with a decrease in the wave length of the absorbable cathode light. A proposed explanation of this phenomenon takes into account the energy model of the Sb-Cs cathode and considers the energy of the 2 layers formed on its surface.

J. M. Widom

Politova, N. M.

Distr: 4E4j/4E2c

"Surplus" velocities in the energy spectrum of photo-
electrons from a cesium-antimony cathode. N. M. Poli-
tova. *Bull. Acad. Sci. U.S.S.R., Phys. Ser.* 20, 948 (1956)
(English translation).—See C.A. 51, 3285k. B. M. R.

9/ Jan

3
2

Pol'tova, N. M.

✓ "Surplus" velocities in the energy spectrum of photoelectrons from a cesium-antimony cathode. N. M. Pol'tova. *Izvest. Akad. Nauk S.S.S.R., Ser. Fiz.* 20, 1050-1 (1950); cf. *C.A.* 49, 3648f. — The velocities of photoelectrons emitted from spherical photocathodes under illumination with light of 4000-6300 Å. were detd. by retarding potential measurements. The work function was const. for different layer thicknesses and substrates and equal to 1.83 ± 0.02 e.v., whereas the work function calcd. from Einstein's equation varied from 1.3 to 1.6 e.v. and it increased by 0.2 e.v. when the wave length decreased from 6200 to 4000 Å. Metallic cathodes have the same work functions. Thus, Sb-Cs cathodes have a surplus velocity which is attributed to the accelerating action of an elec. double layer on the surface, 10^{-4} cm. thick and with the pos. charge on the outside. S. Paksver

SOV/109-4-4-24/24

AUTHORS: Vasil'yev, G.F., Politova, N.M., Shabel'nikova, A.E.,
Pervova, L.Ya. and Yasnopol'skaya, A.A.

TITLE: Interdepartmental Seminar on Cathode Electronics (The 11th
Meeting) (Mezhduvedomstvennyy seminar po katodnoy
elektronike) (11-e zasedaniye)

PERIODICAL: Radiotekhnika i elektronika, 1959, Vol 4, Nr 4,
pp 731 - 732 (USSR)

ABSTRACT: A meeting of the seminar took place on December 1, 1958
at the Institut radiotekhniki i elektroniki AN SSSR
(Institute of Radio-engineering and Electronics of the
Ac.Sc.USSR). During the meeting 8 papers were read.
Yu.G. Ptushinskiy read a paper entitled: "Kinetics of
the Adsorption of Oxygen on the Surface of Tungsten".
The second paper, by I.M. Dykman and S.M. Pekar,
dealt with "The Admixture Photo-effect of Semiconductors
in the Region of the Exciton Light Absorption". The
paper by T.L. Matskevich was devoted to "The Problem of
the Secondary Electron Emission of Fine Films of a
Number of Organic Substances". The problem of "Surface
Ionisation in a Strong Electric Field on a Surface with

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SOV 109-4-4-24/24
Interdepartmental Seminar on Cathode Electronics (The 11th Meeting)

a Non-homogeneous Work Function" was considered by E.Ya. Zandberg and N.I. Ionov. I.N. Bakulina and N.I. Ionov read a paper entitled "Determination of the Electron Attachment Energy and of the Potentials of Atoms by the Method of Surface Ionisation". N.L. Yasnopol'skiy and A.P. Alekseyevadealt with the problem of "Passage of Steady-state Currents Through a Dielectric When the Current Carriers Arc Introduced Through One of the Contacts by Means of Electron Bombardment". The lecture by D.A. Ganichev and K.G. Utkin discussed the following - "The Possibility of the Analysis of the Total-energy Distribution of Electrons in a Quasi-spherical Condenser". The work by M.L. Kapitsa, S.A. Fridrikhov and A.R. Shul'man dealt with an investigation of the secondary electron emission and the characteristic energy losses of a number of dielectrics (glass, mica, fluorite and alkali-haloid monocrystals).

Card 2/2

USCOMM-DC-60997

POLITOVA

N.M.

5/109/60/005/05/020/021
E140/K435

AUTHORS: Basalaveva, N.Ya., Vikhlyayeva, R.P., Zhdan, A.G.,
Zernov, D.V., Kofanova, T.I., KRYLOVA, I.Ya.,
POLITOVA, N.M., Polyakova, M.A., PZESY, B.N., Spivak, G.V.,
Shabel'nikova, A.E. and Yasnopol'skaya, A.A.

TITLE: Report on the Ninth All-Union Conference on Cathode
Electronics

PERIODICAL: Radiotekhnika i elektronika, 1960, Vol 5, Nr 5,
pp 866-879 (USSR)

ABSTRACT: This conference took place in Moscow from 21-28th
October 1959 with the participation of Soviet scientists
and guests from Hungary, Eastern Germany, the Chinese
Peoples' Republic and Czechoslovakia. The chairman of
the organization committee was Academician Vekshinskiy.
The report consists of brief abstracts of 125 papers
presented at the plenary sessions and the sections of
the conference. 15 Reports were presented in the section
on surface properties of solids dealing with electron
adsorption and structural properties of active surface
films. Electron-optical studies of "patch fields" on
emitting surfaces were discussed. 6 Papers on the

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physics of semiconductor cathodes were given in the
section on thermionic emission. 17 Papers were
presented in the section on photoelectric emission.
Many papers discussed industrial technology of photocells
and multipliers. 16 Papers were presented at the section
on secondary-electron emission. The section on field
emission heard 11 papers discussing pulse field
emission at high current densities, surface phenomena,
field emission of semiconductors and the "condenser"
cathode. More than 50 papers and brief communications
were presented at the section on properties, new types
and technology of cathodes, relating to the technology
of various types of cathodes, their behaviour in
practical devices and the operating mechanisms of
individual cathodes. 19 Papers were given at the
section on interaction of solid bodies with streams of
charged particles and residual gases. Notes of
conference discussion indicated that several sharp and
critical exchanges of views took place.

Card 2/2

S/109/60/005/008/011/024
E140/E355

9,4160(3201,1003,1137)

AUTHORS: Lifshits, T.M., Kokina, N.G. and Politova, N.M.

TITLE: Photoelectric Properties of Barium-magnesium Alloys

PERIODICAL: Radiotekhnika i elektronika, 1960, Vol. 5, No. 8, pp. 1267 - 1274

TEXT: A continuation of earlier work (Ref. 1) with the purpose of establishing whether the phenomena observed are of a surface or a volume character. The experimental procedure excluded the possibility of the properties of the Mg-Ba photocathode being due to a barium film on a magnesium surface or oxidation of a surface layer of barium. It is postulated that a stable alloy is formed. The properties are stable in vacuum between 10^{-9} and 10^{-7} mm Hg. The alloy formed is of metallic character, as shown by comparison with pure Mg-photocathodes. The depth of the electron emission from the metal as a function of energy appears to be related to the appearance of a characteristic energy loss due to excitation of plasma oscillations. Their frequency could be determined

Card 1/2

L 15938-66 EWT(m)/T WE/GD

ACC NR: AT6020587

SOURCE CODE: UR/0000/65/000/000/0036/0042

AUTHOR: Rudakova, N. Ya.; Polishchuk, S. A.; Sheremeta, B. K.; Sereda, Z. Ya.

ORG: UkrNIIgiproneft %/

38
B+1

TITLE: Physicochemical properties and group composition of petroleum from Oktyabr' field

SOURCE: Neftepererabotka i neftekhimiya (Petroleum refining and petroleum chemistry). Kiev, Naukova dumka, 1965, 36-42

TOPIC TAGS: diesel fuel, gasoline

ABSTRACT: In order to study the physicochemical properties of narrow fractions of Oktyabr' petroleum, the latter was distilled on an ARN-1 unit up to 220°C at atmospheric pressure and under vacuum above that temperature. Analysis showed a high content of low-octane gasoline fractions (50.66% up to 200°C) of low detonation stability. The 85-200°C fraction is recommended for use as stock for catalytic reforming in the production of high-octane gasoline. From the 120-220°C fraction, TS-1 fuel meeting all GOST requirements except the content of aromatic hydrocarbons can be obtained; DL diesel fuel corresponding to GOST standards in all characteristics can be obtained from the 220-350°C fraction, and DZ diesel fuel satisfying all the GOST requirements is obtained from the 170-300°C fraction. The 300-350°C fraction may be used as a component of DL diesel fuel. The residue of the distillation of Oktyabr' petroleum up to

Card 1/2

L 15938-66

ACC NR: AT6020587

380°C amounts to 5% of its weight and may be used as cracking stock. Orig. art. has:
4 tables.

SUB CODE: 11/ SUBM DATE: 01Dec65

LS

Card 2/2

POLITOVA, S.F.; PETROVA, N.D.

Comparative evaluation of the biological properties of the
Leningrad and Moscow strains of a fixed rabies virus. Trudy
Irk. NIEM no. 6:129-133 '61. (MIRA 17:7)

1. Iz antirabicheskoy laboratorii Irkutskogo nauchno-issledova-
tel'skogo instituta epidemiologii i mikrobiologii.

VALUYEVA, V.N.; POLITOVA, S.F.

Production of vaccines. Trudy Irk. NIIEM no. 7:15-18 '62
(MIRA 19:1)

GARVEY, N.N.; POLITOVA, Ye.M.; YELPAT'YEVSKAYA, G.N. (Moskva)

Clinical and morphological characteristics of chronic radiation sickness caused by external irradiation in an experiment. Gig. truda i prof. zab. 6 no.12:26-33 D'62.

(MIRA 16:7)

1. Nauchno-issledovatel'skiy rentgeno-radiologicheskiy institut.
(RADIATION SICKNESS)

POLITOVA, Ye.M.; YELPAT'YEVSKAYA, G.N.; GARVEY, N.N.

Change in the content of readily separable iron and erythroblastic
hemopoiesis in acute radiation sickness. Lab.delo 7 no.9:20-24
S '61. (MIRA 14:10)

1. Radiologicheskiy otdel (zav. - prof. A.V.Kozlova) Rentgeno-
radiologicheskogo instituta (dir. - prof. I.G.Lagunova), Moskva.
(IRON IN THE BODY) (RADIATION SICKNESS)
(HEMOPOIETIC SYSTEM)

SENDEL', O.S. (Moskva); KLIMENKO, A.A. (Moskva); POLITOVA, Ye.M. (Moskva)

Elements of atypical tissue in marrow punctate of patients with
some malignant diseases. Trudy TSentr. nauch.-issl. inst. rentg.
i rad. li no.1:53-59 '64. (MIRA 12:11)

DOLABERIDZE, L.D.; POLITOVA, Yu.V.; GVELESIANI, L.T.; DZHALIASHVILI, A.G.

Colorimetric determination of aluminum in geologic rocks. Zav.lab. 30
no.12:1439-1441 '64. (MIRA 18:1)

1. Kavkazskiy institut mineral'nogo syr'ya.

POLITOVA, Yu.V.; DOLABERIDZE, L.D.

A simplified method of determining copper in secondary sulfides after its extraction by thiocarbamide solutions in the course of chemical phase analysis. Trudy KIMS no.5:113-115 '63.

(MIRA 18:10)

DOLABERIDZE, L.D.; POLITOVA Y.M.V.; GVEJESIANI, L.T.; DZHALIASHVILI, A.G.

Determination of aluminum in silicates and carbonates, and in iron,
titanomagnetite, and manganese ores. Trudy KIMS no.5:81-94 '63.
(MIRA 18:10)

CA

16

Effect of wine components on its freezing point. M. A. Gerasimov and T. K. Poltova-Sovaenko. *Vinodoliz i Vinogradarstvo S.S.S.R.* 9, 6-10(1946).—To accelerate clearing, wine is cooled. Cooling to near the f.p. is often as effective as fining. However, when cooled to freezing, wine acquires a "burnt" flavor. The f.p.s. of 50 wines from various parts of the Soviet Union were detd. The density, alc. content, titratable acidity, volatile acids, tannins, ash, ash alky., and sugar content were also detd. simultaneously.

M. Hosh

ASB. S. A. METALLURGICAL LITERATURE CLASSIFICATION

COMMON ELEMENTS										PROCESSING AND PROPERTY NOTES										INFO AND 4TH (R018)									
CA																				16									
<p>The tannins in grape products. T. K. Politova-Sov- zenko: <i>Vinodol' i Vinogradarstvo S.S.S.R.</i> 7, No. 12, 18-20(1947).—Wine and grape stems were analyzed for tannins. The method was that used in extg. these from tea leaves in the process of fermentation. The tannins of grapes belong to the group of catechins which are tied up with gallic acid. J. S. Joffe</p>																													
<p>ASB-31A METALLURGICAL LITERATURE CLASSIFICATION</p>																													
<p>SEARCHED BY</p>										<p>INDEXED BY</p>										<p>FILED BY</p>									
<p>DATE</p>										<p>DATE</p>										<p>DATE</p>									

CA

Determination of volatile acid in wines having a high sulfur dioxide content. T. K. Politova-Sovsenko and P. P. Dikhtyar (Magarach Inst., Moscow). *Vinodelie i Vinogradarstvo, S.S.S.R.* 8, No. 8, 32-3(1948).—To ensure reproducible results, combined SO_2 is eliminated by aerating a 25-cc. wine sample for an hour (approx. 10 l. air passed through) before distg. off the volatile acids for titration. Harold T. Oatfield

GERASIMOV, M.A., prof.; POLITOVA-SOVZENKO, T.K., kand. tekhn. nauk;
ADAMSON, N.F., otv. za vyp.; LANKAU, Ye.P., otv. za vyp.;
MANVELOVA, Ye.S., tekhn. red.

[Technology of madeira-type wine] Tekhnologiya vina tipa
madera. Moskva, TSentr. in-t nauchno-tekhn.informatsii
pishchevoi promyshl., 1963. 43 p. (MIRA 17:4)

10-17077-00000000-7A

Thermal treatment of strong dessert wines. M. G. Gerasimov and T. K. Politova-Sovzenko (All-Union Sci. Research Inst. Vinitest and Vitekt, "Mangarach," Moscow). *Biokhim. Vinodeliya, Akad. Nauk S.S.S.R., Sbornik 3*, 147-70 (1950).—Strong grape wines (18.5–20% alc.) were heat-treated at 70° for 60 days and at 40–45° at 10 and 30 days, in 0.75-l. glass bottles with no access to O, with access to O (13 mg. O/l.), satd. with O (86 mg. O/l.), and with $\frac{1}{2}$ the bottle air chamber (275 mg. O/l.). After that their chem. (alc., aldehydes, acetal, volatile esters, titratable acidity, volatile acids, tannins, sugar, and total N), phys. (the relative color change, transparency, caramellization, e.m.f. E_H , r_H , and pH), and organoleptic characteristics (flavor, bouquet, and taste) were detd. The chem. changes with the time of treatment were typical for the formation of Madeira wine. At 70°, the greatest changes were with the largest amt. of O: aldehydes increased from 37.8 to 120.0, acetal from 21.2 to 41.2, volatile esters from 405 to 756.8 mg./l., while E_H decreased from 377 to 272, e.m.f. from 133 to 23.5 mv., and r_H from 20.04 to 16.46. Organoleptic qualities depended on temp., duration of the treatment, and presence of O during the processing. In the presence of a large quantity of O dissolved in wine a typical bouquet and taste of the Madeira type of wine is formed.

The heat-treatment without O causes the formation of the dessert-type of wine. Duration of the treatment with normal access of O is a function of the temp.: at 40, 45, 55, and 60° a good-quality port wine is formed during 25, 20, 15, and 10 days, resp. However, the best-quality dessert wines are formed when processed without O: good products were obtained by 3-day treatment of wine at 70° followed by 10 days at 40–45°. Oxidation-reduction reactions are mainly responsible for the formation of the particular type of wine. E. Wierbicki

(1)

POLITOVA-SOYZENKO T.K.

The importance of tannins and coloring substances in the production of Madeira wine. T. K. Politova-Sovzenko (Magarat Inst., Moscow). *Vinodelie i Vinogradarstvo S.S.S.R.* 10, No. 10, 21-4 (1950); *Chem. Zentr.* 1951, 1, 3434. -- The production of Madeira wine is promoted by the tannins and pigments present in large amts. in the raw materials for such wines. These substances can be extd. from such material with boiling alc. or AcOEt and then pptd. by CHCl_3 . When this extd. material was added to wines which were not themselves suitable for the production of Madeira, the typical Madeira bouquet was imparted to the wine. The expts. were carried out in glass vessels so that the addn. of oak chips or the use of oak casks is not necessary. Heavy metals in concns. of 10 mg./l. did influence the process, however. Cu had a beneficial effect, Fe had an inhibiting effect, and Mn prevented the development of the Madeira bouquet. M. G. Moore

POLOTOVA-SOVSSENKO, T.K.; DIKHPIAN, G.P.

Indicators and Test Papers

Preparing an indigo carmine solution. Vin. SSSR 12 No. 1, 1952.

Monthly List of Russian Accessions. Library of Congress, August 1952, Unclassified.

POLETO, A-SUVZENKO, T. K.

Wine and Wine Making

Determining the "spray poison" potential in wine. Vin. SSSR 12, No. 7, 1952.

Monthly List of Russian Accessions, Library of Congress
October 1952. UNCLASSIFIED.

POLITOVA-SOVZENKO, T. K.

① The chemical constitution and qualities of wines. T. K. Politova-Sovzenko (Moscow Branch Inst. "Magarach"); *Vinechno i Vinogradarstvo S.S.S.R.* 14, No. 2, 10-13 (1954).—Three extensive tables show the chem. nature of wines which were made in Russia, Hungary, Germany, and France and indicate significant differences in their chem. features. Wines contain 9-17.6% alc. The Russian and French wines contain tartaric (1.53-5.27) and malic (0.45-2.94 g. per l.) acids which are lacking in Hungarian and Rhine wines. While the acidity in several wines increases frequently to 7-11 g. per l., in the Rhine wines it amounts to only 5.6. These wines are mild and have a high quality. A considerable amount of H_2SO_4 is found in Mosel wines (42.2-177.4 mg. per l.), hence this acid is used in the production of corresponding wines.
E. Markus

①

POLITOVA - SOVZENKO, T.K

✓ The influence of heating on the composition of wine.
T. K. Politova-Sovzenko (Moscow Branch Inst. "Maga-
rach"). *Vinogradarstvo S.S.S.R.* 14, No. 7,
8-12 (1954).—II has heated for 2 months 1 l. of wine at 60°
(a) without O, (b) with 12 mg./l. O, or (c) with 800 mg./l. of
O; the amt. of some constituents of the wine increases.
Aldehydes increase 28.2, 40.0, 120.0 mg./l.; acetals 28.9,
29.0, 41.2; middle mol. wt. ethers 588.4, 686.4, 756.8,
resp. On the other hand, the amt. of N decreases 164.0,
162.0, 151.0 mg./l., resp. The percentage of alc. remains
almost stable at 18.7, 18.5, 18.4%, resp. R. Markus

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POLITOVSKIY, M. [Politowski, M.]; SHPAK, Ye. [Szpak, J.]; MARSHALEK, Z.
[Marszalek, Z.]

Treatment of varicose veins of the lower extremities using electro-
coagulation. Khirurgiia 40 no.11:28-33 N '65. (MIRA 18:7)

1. 3-ya khirurgicheskaya klinika (dir. - prof. Ye.Yasen'skiy
[Jasienski, J.] Meditsinskoy akademii, Krakov, Pol'sha.

POLITOWSKI, Mieczyslaw; SZPAK, Edmund; MARSZALEK, Zygmunt

Treatment of varicose veins of the lower extremities with the aid of electrocoagulation. Pol. przegl. chir. 36 no.1:7-14, Ja'64

1. Z III Kliniki Chirurgicznej AM w Krakowie; kierownik: prof.dr. J.Jasienski [deceased].

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POLITOWSKI, Mieczyslaw

On the problem of so-called "complete relaxation of the Diaphragm" and of its surgical treatment. Pol. tyg. lek. 18 no.6:224-226 4 F '63.

1. Z III Kliniki Chirurgicznej AM w Krakowie; kierownik Kliniki:
prof. dr Jerzy Jasienski.
(DIAPHRAGM) (DISEASES) (SURGERY, OPERATIVE)

FOLJTOWSKI, M.

Prof. Dr. Jerzy Jasienski. Pol. przegl. chir. 36 no.4:425-
433 Ap '64.

POLAND

POLITOWSKI, Mieczyslaw; Third Surgical Clinic (III Klinika Chirurgiczna), AM /Akademia Medyczna -- Medical School/ in Krakow, Director of the Clinic: Prof Dr Jerzy JASIENSKI

"On the So-Called 'Complete Atonia of the Diaphragm' and its Surgical Treatment. Report of 2 Cases."

Warsaw, Polski Tygodnik Lekarski, Vol XVIII, No 6, 4 Feb 1963, pp 224-226.

Abstract: /Author's English summary modified/ Reference is made to the numerous reports on the diagnosis and treatment of atonia of the diaphragm. Two cases of complete atonia of the diaphragm treated surgically are reported. Surgical treatment should be applied after detailed consideration of the case. Plastic surgery of the diaphragm usually causes increase of the lesion in its respiratory function. However, if severe clinical signs are observed and surgery performed, the stomach should be fixed to the abdominal integuments by the Nissen-Rosetti method. 3 illustrations; 6 Eastern, 10 Western references

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POLITOWSKI, Mieczyslaw

Fistulocholangiography through choledochal fistula. Polski
przeegl. chir. 28 no.10:1031-1036 Oct 56.

1. Z III Kliniki Chirurgicznej A.M. w Krakowie Kierownik:
prof. dr. J. Jasienski, Adres Autora: Krakow, ul. Pradnicka 37.

(CHOLELITHIASIS, diagnosis,

fistulo-cholangiography (Pol))

(CHOLANGIOGRAPHY,

fistulo-cholangiography in lithiasis (Pol))

POLITOWSKI, Mieczyslaw; DZIADDECKI, Jan; KLATKA, Jerzy

Capillaroscopy in clinical medicine. Polski tygod. lek.
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Kierownik Kliniki: Prof. Dr. Jerzy Jasienski. Krakow, ul.
Smolenska 11.

(CAPILLARIES

capillaroscopy in clin. med., review (Pol))

POLITOWSKI, MIECZYSLAW

POLAND/Human and Animal Physiology - Blood Circulation.
Vessels.

T-6

Abs Jour : Ref Zhur - Biol., No 10, 1958, 46098

Author : Jasieński, Jerzy; Politowski, Mieczysław

Inst : -

Title : Blood Circulation in the Capillaries.

Orig Pub : Polski tygod. lekar., 1957, 12, No 25, 965-971

Abstract : No abstract.

Card 1/1

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MACZKA-PATKANIOWSKA, Z.
MACZKA-PATKANIOWSKA, Z.; POLITOWSKI, M.

Retropneumoperitoneum. Polski przegl. chir. 29 no.1:
5-11 Jan 57.

1. Z III Kliniki Chirurgicznej A.M. w Krakowie Kierownik:
prof. dr. J. Jasienski, i z Radiologicznego Oddziału Szpitala
im. G. Narutowicza w Krakowie Ordynator: dr. Z. Maczka-Patkaniowska.
Adres autorów: Krakow, ul. Pradnicka 37.

(PNEUMOPERITONEUM, ARTIFICIAL

retropneumoperitoneum, indic. (Pol))

POLITOWSKI, Mieczyslaw; SOKOLOWSKA-PITUCHOWA, Janina

Giant paramammal of the breast. Polski przegl. chir. 29 no.3:
239-242 Mar 57.

1. Z III Kliniki Chirurgicznej Kierownik: prof. dr.
J. Jasienski i z Zakladu Anatomii Patologicznej Kierownik: prof.
dr. J. Kowalczykowa Akademii Medycznej w Krakowie. Adres autora:
Krakow, ul. Pradnicka 37.

(BREAST NEOPLASMS, case report
paramammal lipoma (Pol))
(LIPOMA, case report
giant, paramammal (Pol))

JASIENSKI, Jerzy; POLITOWSKI, Mieczyslaw

Capillary circulation. Polski przegl. chir. 29 no.5:413-423 May 57.

1. Z III Kliniki Chirurgicznej A. M. w Krakowie Kierownik: prof. dr
Jerzy Jasienski.

(CAPILIARIES, physiology,
review (Pol))

POLITOWSKI, Mieczyslaw

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J. Jasienski Prace wpłynęła dnia 28. 4. 1956. Krakow, ul. pradnicka
37.

(THROMBOANGIITIS OBLITERANS, diagnosis,
capillaroscopy (Pol))

POLITOWSKI, M.; MARSZALEK, Z.; JAROSZ, Z.

Capillaroscopic picture of the skin and intracapillary blood pressure during surgery and during first few days following surgery. Polaki przegl. chir. 29 no.7:641-646 July 57.

1. Z III Kliniki Chirurgicznej A. M. w Krakowie. Kierownik: prof. J. Jasienski.

(SURGERY, OPERATIVE,
capillaroscopy & intracapillary blood pressure in skin
during perop. postop. periods (Pol))

(CAPILLARIES,
same)

(SKIN, blood supply,
same)

EXCERPTA MEDICA Sec 18 Vol. 2/6 Cardio Juno 58

1813. *Behaviour of the capillaries in the capillaroscopic picture in thermal injury.*
Zachowanie się śłośniczek w obrazie kapilaroskopowym w chorobie oparzeniowej.
POLITOWSKI M. and JAROSZ Z. III Klin. Chir. A. M., Kraków *Pol. Przegl. Chir.* 1957,
29/8 (743—746)

At the site of the erythema caused by thermal injury, and only at this site, all capillaries were filled with blood, and in a state of paralytic atony responsible for the pathologically increased permeability of their walls. Conversely, dermal capillaries immediately adjacent to the site of thermal injury were always in a state of reflex spasm, which may be viewed as a defence mechanism against plasma-loss through these capillaries. Dilatation of capillaries, with consequent increased permeability, was never found at sites far from the thermal injury. Neither was there ever seen the alternate constriction and dilatation of the capillaries in the nailfolds of the digits observed in the course of vasomotor neuroses of the limbs. Following thermal injury, in spite of the increased permeability of the walls of the damaged capillaries, the pressure prevailing in the capillaries, measured by means of the indirect method, is maintained at the normal level (average: 25 mm. Hg). (XVIII, 9)

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Oscillometric variations in the extremities during surgery and
after surgical injury. Polski przegl. chir. 29 no.8:747-753 Aug 57.

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J. Jasienski Prace wpłynęła: 28. 4. 1956. Krakow, Pradnicka 37.
(OSCILLOMETRY,
perop. & postop. of extremities (Pol))
(SURGERY, OPERATIVE,
perop. & postop. oscillometry of extremities (Pol))

POLITOWSKI, Mieczyslaw.; MARSZALEK, Zygmunt; JAROSZ, Zdzislaw

Blood pressure in the capillaries. Polski tygod.lek. 13 no.10:364-368
10 Mar 58

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J. Jasienski.

(BLOOD PRESSURE,

in capillaries, review (Pol))

(CAPILLARIES,

blood pressure in capillaries, review (Pol))

POLITOWSKI, Mieczyslaw; MARSZALEK, Zygmunt; JAROSZ, Zdzislaw

Preoperative blood pressure in skin capillaries & during 1st day of postoperative period. Polski tygod. lek. 13 no.30:1156-1159 28 July 58.

1. (Z III Kliniki Chirurgicznej A. M. w Krakowie: kierownik: prof. dr Jerzy Jasienski) Krakow, ul. Smolensk 11.

(CAPILLARIES, physiol.

preop. & postop. blood pressure in skin capillaries (Pol))

(SKIN, blood supply

same)

(SURGERY, OPERATIVE, eff.

on blood pressure in skin capillaries (Pol))

(BLOOD PRESSURE

preop. & postop. pressure in skin capillaries (Pol))

POLITOWSKI, Mieczyslaw

Venous lesions of the extremities in Burger's disease and in arterio-sclerosis obliterans. Polski tygod. lek. 13 no.48:1911-1916 1 Dec 58.

1. (Z III Kliniki Chirurgicznej Akademii Medycznej w Krakowie; Kierownik: prof. dr Jerzy Jasienski). Adres: Krakow, ul. Pradzicka 37. III Klinika Chirurgiczna A.M.

(THROMBOANGIITIS OBLITERANS, pathol.
venous lesions (Pol))

(ARTERIOSCLEROSIS OBLITERANS, pathol.
same)

POLITOWSKI, Mieczyslaw

Double vasopgraphy arteriography and phlebography) as indispensable auxiliary method of examining vessels of extremities. Polskie arch. med. wewn. 28 no.5:729-731 1958.

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(VASCULAR DISEASES, PERIPHERAL, diag.

serial arteriography & phlebography (Pol))

(ANGIOGRAPHY, in various dis.

arteriography & phlebography in peripheral vasc. dis.,

diag. value (Pol))

POLITOWSKI, Mieczyslaw (Krakow, ul. Pradnicka 37)

Baytinal, a new narcotic. Polski przegl. chir. 30 no.6:685-689 June 58.

1. Z III. Kliniki Chirurgicznej A. M. w Krakowie Kierownik: prof. dr Jerzy Jasienski.

(BARBITURATES, anesth. & analgesia

5-allyl-5-isobutyl-2-thiobarbituric acid, indic.)

MACZKA-PATKANIOWSKA, Zofia; POLITOWSKI, Mieczyslaw

Role of phlebography in arterial diseases of the lower extremities.
Polski przegl. radiol. 25 no.4:325-330 '61.

1. Z III Kliniki Chirurgicznej AM. w Krakowie Kierownik: prof.
J. ~~Jastenski~~ i z Oddziału Radiologicznego Miejskiego Szpitala im.
G. Narutowicza w Krakowie Kierownik: dr Z. Maczka-Patkaniowski.

(ANGIOGRAPHY) (VASCULAR DISEASES PERIPHERAL radiog)

MIREK, Roman; MACZKA-PATKANIOWSKA, Zofia; POLITOWSKI, Mieczyslaw;
STANOWSKI, Jozef

Congenital diaphragmatic hernia complicated by cerebral embolism.
Pol. przepl. chir. 33 no.12:15-3-1507 '61.

1. Z Oddzialu Chorob Nerwowych Miejskiego Szpitala im. G.Narutowicza
w Krakowie Ordynator: dr R. Mirek Z Oddzialu Radiologicznego Kierownik:
dr Z. Maczka-Patkaniowska z III Kliniki Chirurgicznej ~~AM~~ w Krakowie
Kierownik: prof. dr J. Jasienski z Oddzialu Chorob Wewnetrznych
Kierownik: prof. dr F.Siedlecki z Pododdzialu Kardiologicznego.
(HERNIA DIAPHRAGMATIC compl)
(CEREBRAL EMBOLISM AND THROMBOSIS in adolescence)

POLITOWSKI, Mieczyslaw

Surgical therapy of rupture of the thoracic duct with escape of lymph into the pleural cavity. Polski przegl. chir. 34 no.2:148-153 '62.

1. Z III Kliniki Chirurgicznej AM w Krakowie Kierownik: prof.
dr J. Jasienski.

(CHYLOTHORAX surg)

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